

THE PLANNING MODEL OF WATERFRONT KAMPUNG REDEVELOPMENT IN JAKARTA COASTAL AREA

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ABSTRACT

Reconsidering the new waterfront city development of Jakarta historic coastal area, this paper tries to find a model for conserving urban waterfront kampung and heritages in harmony with the new development purposes.

It is necessary to aim for the use of old port kampung or coexistence with a fishing port as part of a revitalization plan or redevelop a traditional fishing port and settlement in the development of marine city and residential city in the context of new waterfront city development. In each of these cases, it is necessary to come up with a design based on the community character and the unique features of the location such as using the historic port as marine heritage park in Sunda Kelapa or fisherman village as part of marine recreational park development, both of which could be supported by the potential of the local kampung residents who have the traditional marine cultural background of craft, skill and life style.

1. INTRODUCTION

1.1. Description of the Location

The whole study area is located in the northwestern part of Jakarta waterfront area. The area is bounded by a harbor toll-road that functions as a connecting road between the western and eastern parts of the waterfront area. This area serves as a mixed use area with the development of a new high density, high rise waterfront city associated with the high density kampung and fishing villages and with the heritage conservation area of Kota and Sunda Kelapa.

There are three main sub-areas of the plan which from the west to east comprise: 1) The Western Area, including Pantai Indah Kapuk and Pluit. 2) The Central Area, including Sunda Kelapa and Ancol. 3) The Eastern Port Area of Tanjung Priok and areas to the east.

The western area is proposed to be developed for a residential area with the expansion of Pantai Indah Kapuk and other developments on the reclaimed land. Approximately 1000 hectares of new land will be available for this purpose.

The central area of waterfront is proposed for a mixed-use development area with a new high density, high rise, business and residential zone north of Kota and east of Sunda Kelapa. Kota and Sunda Kelapa are preserved in the form of heritage-park concept. The

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new business district of the east will be able to accommodate 8 million sqm of new commercial space. In addition, another 3 million sqm of new hotels and condominium apartments will be developed adjacent to the business districts along the waterfront areas. East of the new business districts a mixture of commercial services, medium density residential and recreation and tourism facilities are planned. Approximately 1,300 hectares of land will be involved in the central area, of which 1,170 ha will be reclaimed land.

The eastern port area is proposed to expand the port of Tanjung Priok. Adjacent to the expanded Tanjung Priok, the plan proposes a port support of offices, showrooms and other services just to the west of the port. To the east of the port approximately 300 ha of new lands will be available for development. The plan recommends this land to be reserved for industrial warehouses. The kampung redevelopment policy in this area is the removal of existing fishing villages in Cilincing in the eastern area to the new development area of Angke fishing villages in the western area.

The kampung redevelopment issues in the context of waterfront area development are the rapidly growing population in the area such as in Penjaringan, Luar Batang Kampung and Muara Angke fishing village, and the heritage significance of the historic core of Kota and the old port of Sunda Kelapa.

The Jakarta development plan policy is to restrict urban development to the south particularly for commercial development. The Jabotabek metropolitan strategy directs the urban development expansion towards the east and west and, in addition, contemplates development to the north. It is necessary that the Jakarta urban growth move along the east-west lines of the northern coastal area in order to maintain the critically important waterfront areas of southern Jakarta.

The creation of land through a reclamation project along the northern waterfront is intended to add the stock of land within the currently limited supply of the Jakarta metropolitan area.

The rapidly growing population in the residential area of Jakarta waterfront indicates the linkage between residential activities and working opportunity growth in this area. This could be observed in the area such as the Penjaringan high density kampung, Luar Batang old port kampung, and Muara Angke fishing urban village. The issues of kampung waterfront redevelopment include the impact of new waterfront city development on housing areas and available employment, and the increasing demand for high quality residences in strategic waterfront location.

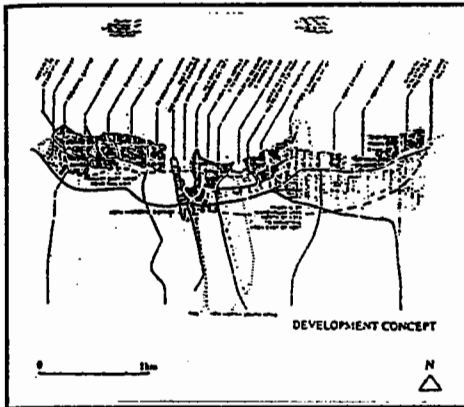


Fig.1. Development Concept of Jakarta Waterfront City

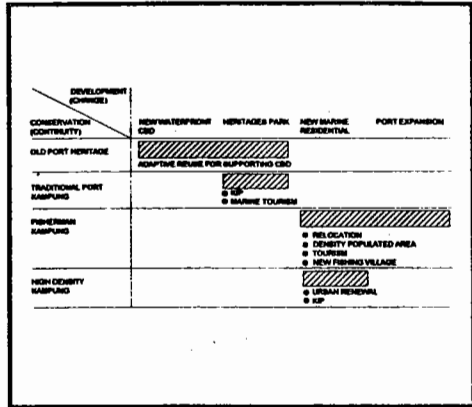


Fig.2. Forms of Conflict Solution in Development and Conservation Efforts

1.2. Objectives

The purpose of this study is to explain the pattern and characteristics of urban renewal and kampung redevelopment, and to identify some problems and opportunities for finding a viable way to redevelop kampung housing in the inner city of the waterfront area.

1.3. Methods

First, evaluation of the waterfront development in relation to proposed plan and key issues of new CBD development and historic area conservation. Second, investigation of two kampung areas in view of area morphology, types of residents, types of dwelling, the system of ownership and space use. Third, identification and evaluation of some problems and recommendation of some design and planning notes for kampung redevelopment in the context of waterfront area development.

2. PROFILE OF THE STUDY AREA

2.1. Luar Batang Old Port Kampung

The total population of Luar Batang is 10,336 with a density of 419,5 people/hectare of the total area of 24,637 ha. This area covers 3 kampung subdistrict areas. The job composition in Luar Batang consists of 51.6% marine jobs and 48.4% non-marine jobs. And the survey of 76 respondents of this study shows that they are public officials (10 resp.), private formal (8 resp.) and private informal (58 resp.) The private informal include fishing workers (7 resp.), ship owners (4 resp.), ship crew (6 resp.), handicraftsmen (4 resp.), fish traders (8 resp.), port workers (16 resp.), port shop keepers (2 resp.) and carpenters (11 resp.).

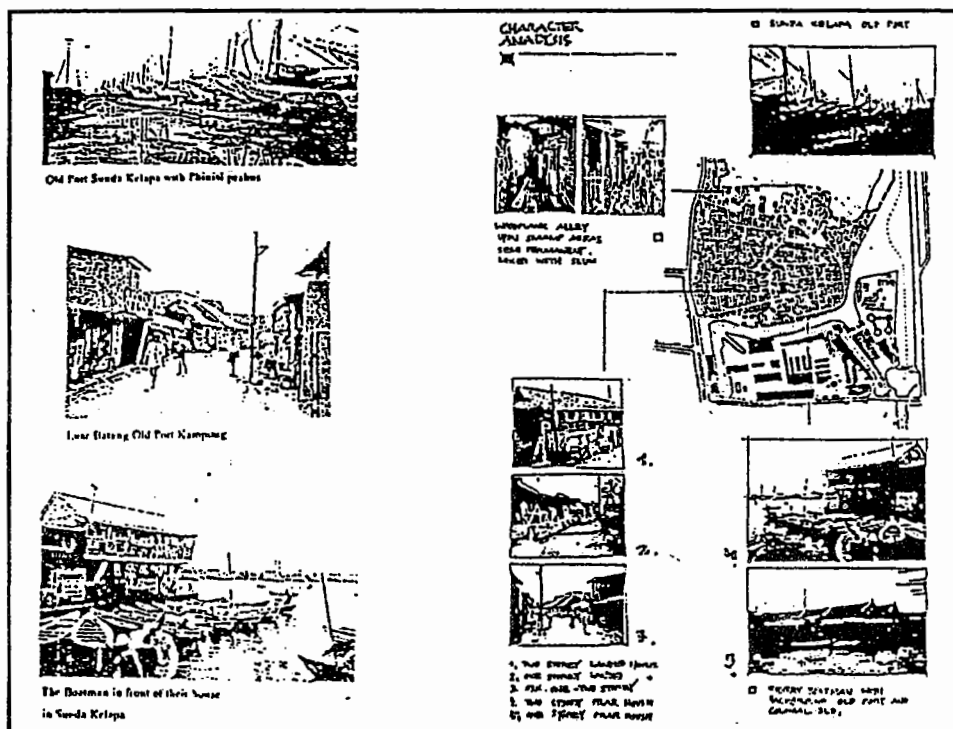


Fig. 3. Luar Batang Old Port Kampung

The housing condition of this area could be classified into three types of permanent, semi permanent and temporary. The street types in Luar Batang vary as follows: 1) Main street of 3-4 meter wide, asphalted, without pedestrian pathways. 2) Local street of about 2 meters in width improved by KIP for motorbikes and bicycles. 3) Alley street of 0.8 meter in width. 4) Wooden-plank alley between houses built on embankment.

2.2. Angke Fisherman Kampung

The total population of fishermen in Jakarta is 12,868 with 2,524 fishingboats and a total area of fishponds of 176.5 hectares. The operation areas for fishing cover the bay area of Jakarta, Seribu Island, Northern Coastal Area of Java, and South Sumatra.

The fish processing area is categorized into traditional fish processing in Muara Angke and modern processing in Muara Baru by utilizing fishing port and market.

Muara Angke is located in the northwest of Jakarta waterfront area in the form of the estuary of the Angke river in Penjaringan district. The new fishing village covers 64.97 areas with an allocation of land use as follows: Residential area (21.26 ha), Offices (6.5 ha), Green belt (1.9 ha), Coast belt (10.51ha), Street and Water Construction (10.6 ha), Shipyard (3.8 ha), Traditional Processing area (5.0 ha), Utilities (5.4 ha).

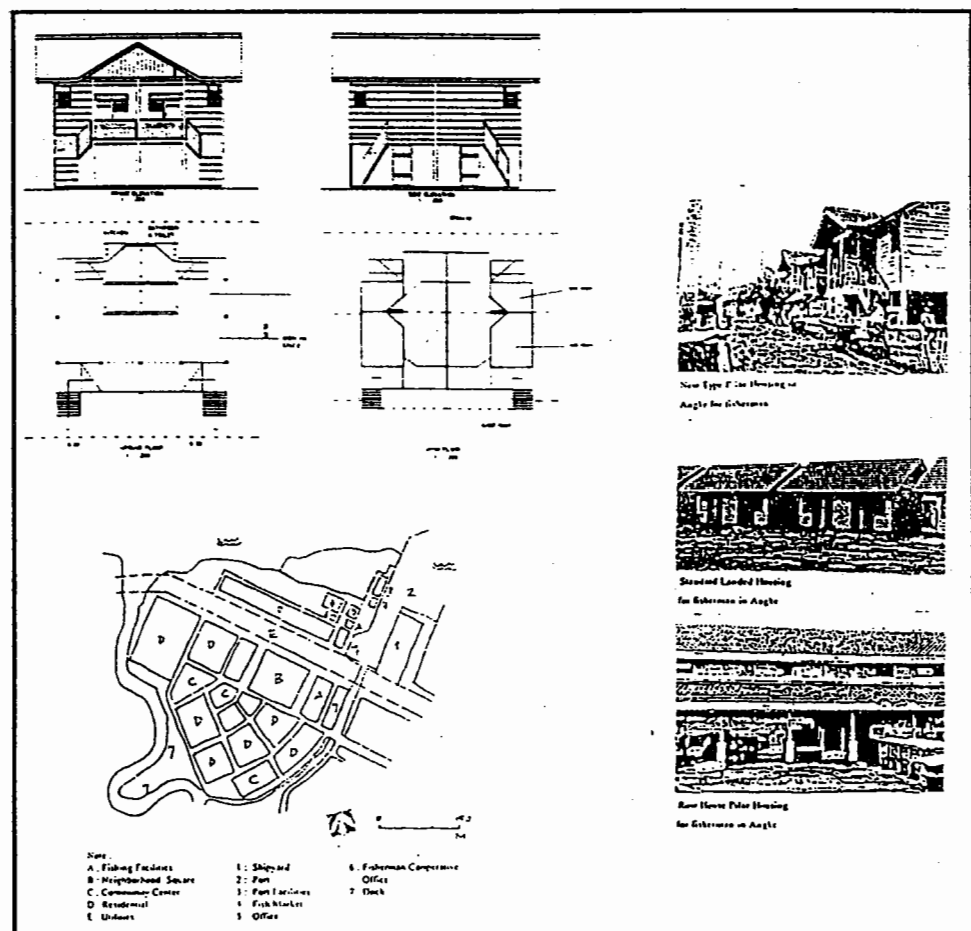


Fig. 4. Angke Fishing Village

The residential area were developed in some stages: 1) Stage 1 in 1976, with 360 units of row house and two-storey pillar house of which the ground floor is used for working area. 2) Stage 2 in 1979, with 180 units of row house and two-storey pillar house. 3) Stage 3 in 1984, with 203 units of row house and two-storey pillar house and community building. 4) Stage 4 in 1990, with 38 units of semi-detached pile house. 5) Stage 5 in 1993, with 135 units of semi-detached landed house.

The total of fisherman housing is 916 units of the 2,500 planned units in the future.

3. SURVEY OF COMMUNITY CHARACTER

The survey of community character of the case study is intended for identifying the similarities and differences of each area. The evaluation notes are presented in the following tables.

Table 1 shows that the working place in Penjaringan community is in the outside of their kampung location while for all of the Angke community it is in the inside, and for Luar Batang community it is 90% in the inside of their kampung location. This indicates that Luar Batang and Angke have more attachment to working place.

Table 2 shows that in Penjaringan the community have more public transport for their mobility than in Luar Batang (65.5% by motorbike and 61.9% on foot) and in Angke (15.5% by motorbike and 84.5% on foot).

Table 1. Working Place (per cent)

Item	Penjaringan	Luar Batang	Angke
Inside Housing Ares	3.3	31.6	100
Outside Near	5.4	59.2	-
Inner City	84.8	9.2	-
Fringe	5.4	-	-
Out of City	1.1	-	-
Sample Size	92 resp.	76 resp.	71 resp.

Table 2. Mobility (per cent)

Item	Penjaringan	Luar Batang	Angke
On foot	6.5	61.9	84.5
Private Motorbike	23.9	65.5	15.5
Public Transport	69.6	2.6	-
Sample Size	92 resp.	76 resp.	71 resp.

The following tables (from table 3 to table 9) show that the characteristics of the waterfront kampung community which have been surveyed are as follows: They do not have plans to move and they give more priority to redevelopment for needs of working opportunity than for affordability and better housing. They have the length of stay from 10 to 15 years, economic activity (10-16%) with the income level of 150 to 300 thousand rupiah, and more informal jobs.

Table 3. Plan to Move (per cent)

Item	Penjaringan	Luar Batang	Angke
Yes	11.9	7.9	2.8
No	80.4	75.0	87.3
No Answer	7.7	17.1	9.9
Sample Size	92 resp.	76 resp.	71 resp.

Table 4. Priority to Redevelopment (per cent)

Item	Penjaringan	Luar Batang	Angke
Working Opportunity	55.5	47.4	52.1
Affordability	10.8	6.6	14.1
Better Housing	10.8	22.4	25.4
No Answer	22.9	23.6	8.4
Sample Size	92 resp.	76 resp.	71 resp.

Table 5. Income (per cent)

Item(Thousand Rp.)	Penjaringan	Luar Batang	Angke
< 100	-	7.9	2.8
100-150	-	1.3	-
150-200	21.7	13.1	36.6
200-250	10.9	22.4	39.4
250-300	40.2	27.6	-
>300	7.6	1.3	5.6
No Answer	19.6	26.4	15.5
Sample Size	92 resp.	76 resp.	71 resp.

Table 6. Occupation (per cent)

Item	Penjaringan	Luar Batang	Angke
Public Official	23.9	13.2	-
Private Formal	20.6	10.5	-
Private Informal	55.5	76.3	100
Sample Size	92 resp.	76 resp.	71 resp.

Table 7. Marine Job (per cent)

Item	Luar Batang	Angke
Fishing Owner	-	21.1
Fishing Worker	12.1	46.5
Ship Owner	6.9	-
Ship Crew	10.3	-
Handicraftman	6.9	-
Fishing Trader	13.8	19.7
Port Worker	27.6	-
Port Shop Keeper	3.5	-
Carpenter	18.9	-
Dry Fish Worker	12.7	-
Sample Size	58 resp.	71 resp.

Table 8. Length of Stay

Item	Penjaringan	Luar Batang	Angke
(in year)			
< 1	-	-	-
1-5	2.2	-	2.8
6-10	23.9	9.2	26.8
11-15	43.5	50.0	42.2
> 15	30.4	40.8	28.2
Sample Size	92 resp.	76 resp.	71 resp.

Table 9. Economic Activity

Item	Penjaringan	Luar Batang	Angke
Part of House as Work Place	4.3	6.6	9.8
As Work Place	11.9	3.9	4.2
Sample Size	92 resp.	76 resp.	71 resp.

Table 10 shows that almost all the population of Penjaringan is from Jakarta while those of Luar Batang old port kampung (65.8%) and Angke fishing village (82.7%) are from outside of Java. Table 11 shows the breakdown of ethnic origins of each case study. This shows that the typology of the waterfront kampung area is historically the destination of urban migration from outside of Java especially dominated by the Bugis ethnic.

Table 12 shows that the Angke community have more rent occupied ownership (45.1%) than in Luar Batang (13.2%) and in Penjaringan (39.1%). This shows that the need and affordability for purchasing houses in Angke fisherman village is lower than in Penjaringan and Luar Batang.

Table 10. Place Origin (per cent)

Item	Penjaringan	Luar Batang	Angke
Local Inhabitant	16.3	9.2	2.8
Other Part of Jakarta	60.9	25.0	15.5
Other Part of West Java	9.8	6.6	28.2
Other Part of Java	4.3	2.6	4.2
Outer Java	8.7	56.6	49.3
Sample Size	92 resp.	76 resp.	71 resp.

Table 11. Ethnic Origin (per cent)

Item	Penjaringan	Luar Batang	Angke
Jakarta	77.2	34.2	18.3
Sunda	4.3	1.3	9.8
Banten	-	3.9	-
Cirebon	5.4	1.3	18.3
Central Java	1.1	-	1.4
East Java	3.3	2.6	2.9
Palembang	-	9.3	5.6
Padang	4.3	3.9	2.9
Aceh	1.1	3.9	2.9
Bugis	-	42.2	40.8
Kalimantan	2.2	1.3	-
Ambon	1.1	-	-
Sample Size	92 resp.	76 resp.	71 resp.

Table 12. System of Ownership

Item	Penjaringan	Luar Batang	Angke
Owned Occupied	60.9	86.8	54.9
Rent Occupied	39.1	13.2	45.1
Sample Size	92 resp.	76 resp.	71 resp.

4. THE EVALUATION OF NEW MODEL OF WATERFRONT KAMPUNG PILE HOUSING

The POE (Post Occupation Evaluation) survey of the Angke pile housing in 16 units shows that the pile house is only used effectively for worker fishermen while most owner fishermen and trader fishermen have changed their pile houses into two storied landed house by enclosing all the ground floors (18.75%) and enclosing some parts of the ground floor (50%), the ground floor for guest room, dining room, bed room or for running a 'warung' (front porch kiosk) or small business activities. The worker fishermen use the ground floor of pile house for working together or for open storage place (31.25%).

The result of Post Occupation Evaluation of Angke pile housing is described in figure 5.

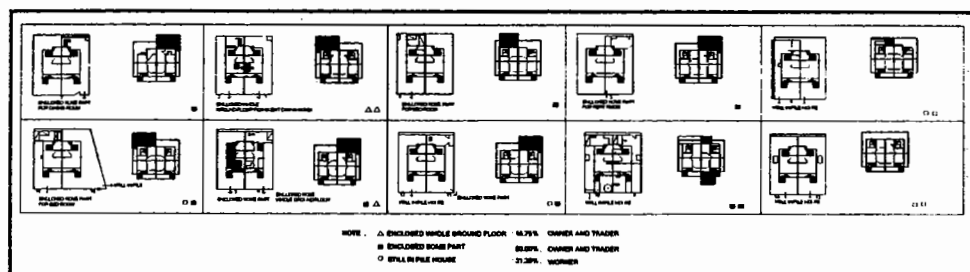


Fig. 5. Room Arrangement of Fisherman Housing

5. KAMPUNG COMMUNITY CHARACTER

After analyzing the site and community character of the case study area, the evaluation notes could be concluded as follows: 1) The kampung typology in the waterfront urban area of Jakarta could be categorized into two types, namely the old port kampungs which have no direct attachment to marine jobs and fishing urban villages which have strong and direct attachment to marine jobs. All of the households of the fishing village (100%) have marine jobs, while the old port kampungs have the composition of 51.6% marine jobs, and 48.4% non marine jobs. 2) The waterfront kampung community which have been surveyed show the following characteristics: they do not plan to move and give more priority to redevelopment for the needs of working opportunity than for affordability and better housing; they have the length of stay from 10 to 15 years, economic activities (10-16)% with the income level of 150 to 300 thousand rupiah and more informal jobs. 3) The system of ownership in the waterfront kampung area is that there is more owned type housing than the rental type with the various types of occupation, which include nuclear family, extended family and dormitory system for one person or group. 4) The differences in the characteristics of three case study areas of waterfront kampung community are as follows: a) The occupation of households in Angke fishing village is all informal while in Penjaringan density kampung area and in Luar Batang old port kampung the households have more informal jobs than formal jobs. b) Almost all the population of Penjaringan density kampung is from Jakarta while those of Luar Batang old port kampung (65.8%) and Angke fishing village (82.7%) are from outside of Java. This shows that the typology of the waterfront kampung area is historically the destination of urban migration from outside of Java especially dominated by Bugis ethnic inhabitants. c) The working place of the Penjaringan community is in the outside of their kampung location while that of all of the Angke community is in the inside, and that of Luar Batang community is 90% in the inside of their kampung location. This indicates that Luar Batang and Angke have more attachment to working place for marine jobs. d) The Angke community have more rent occupied ownership (45.1%) than Luar Batang (13.2%) and Penjaringan (39.1%). This shows that the need and affordability for purchasing houses in Angke fisherman village is lower than in Penjaringan and Luar Batang. 5) The pile house typology is not always appropriate for the waterfront kampung depending on the types of households jobs.

6. THE POSSIBLE MODEL TYPES OF WATERFRONT KAMPUNG DEVELOPMENT

The waterfront kampung area in northern Jakarta has the potential for supporting the waterfront city development because of their marine cultural background dominated by the Bugis ethnic who historically, during the colonial period, made an expansion of the circular trading migration of South Sulawesi. In Luar Batang area the kampung community activities include a variety of port activities including ship working, port working, fish market, shipware shop and market, and marine craft activities, while in Angke fishing urban village the activity concentrate on fishery activity include fishing, fish trading, traditional port and fish processing.

The two possible types of development when establishing a new waterfront city in terms of blending in with the existing surrounding of the kampung area and historic port in northern Jakarta could be in the form of marine city development and residential city development. The first calls for the development of Sunda Kelapa old port area with the new high rise central business district (CBD) and traditional port kampung, with the commercial and marine leisure theme, and the second calls for development of the Kapuk Indah Beach residential city with the traditional fisherman of Angke as recreational facilities which combines work, residential and recreational elements.

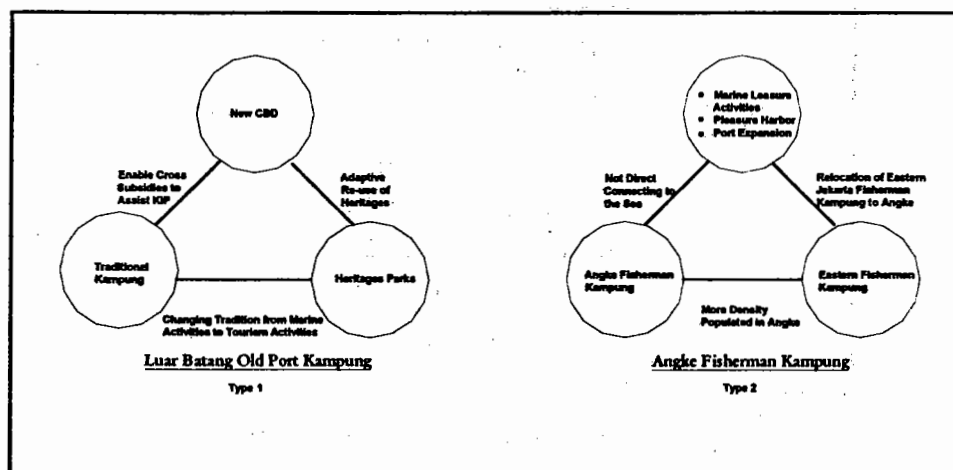


Fig. 6. Linkage and Transformation

The first type offers one of the environmental facilities for visitors to cities and other neighboring areas who come to make use of the marine leisure facilities. Besides activity as a pleasure harbor, this could have a beach, an aquarium, heritage marine park which include traditional marine art festival and souvenir shop/retail by local kampung community who have strong marine cultural background. The second type could also be called the next generation marine city and includes a combination of golf courses, yacht harbors and natural surroundings offering many amenities, all of which add value to a

new-town as well as the establishment of work places within the project area to successfully combine work, residential and recreational functions at the same site. In this case the kampung redevelopment of Angke fishing village could be developed not only for improving the fisherman settlement but also designed for supporting the development concept of marine residential districts which could be included in the form of leisure fishing theme park.

7. CONCLUSION

The social and cultural issues of the waterfront city development include the impact of KIP, the relationship between differing housing areas, availability of employment and the increasing demand for high quality residence in waterfront location. Care must be taken to ensure that there are no adverse impacts from development upon historic buildings and conservation areas of

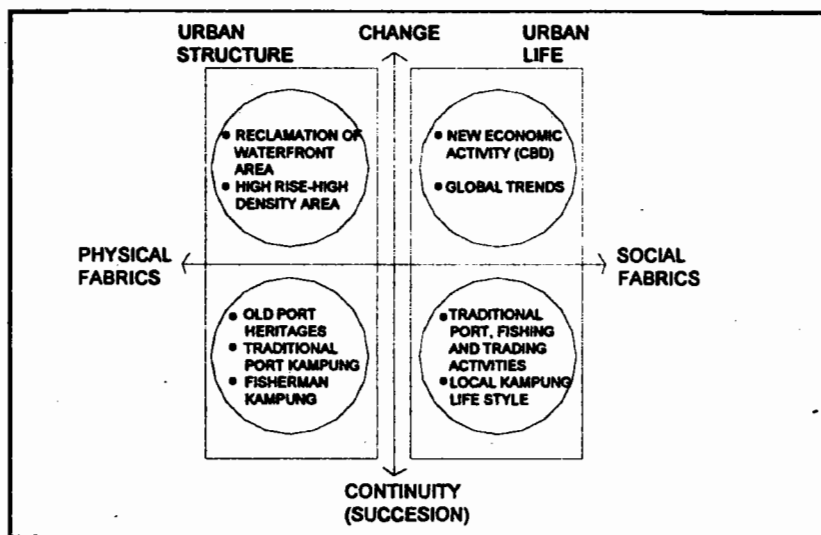


Fig. 7. Urban Continuity for Sustainable Waterfront Development

Sunda Kelapa and the traditional fisherman village of Angke. A new entity such as a new waterfront city development concept which may be set up, would benefit from representation from both conservation and development.

In the concept of harmonization between development and conservation, any new entity such as new CBD and new marine residential area would benefit from representation from urban heritage life and structure, as well as kampung representative objectives and directions which include the historic and social importance of Kampung Luar Batang in Sunda Kelapa Heritage Parks and Angke fishing village in Kapuk Indah Marine City development.

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